

Work Order ID 83417

April-18-12 8:10:10 AM

83417

Page 1

Item ID: D3488-042

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Item Name: Blade Fitting Assembly, RH

Stop ***NS2***

Start Date: 18/04/2012 Start Qty: 12.00

12

Cust Item ID:

Required Date: 02/05/2012 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals: Process Plan: **MLJ**

Date: **12/04/18**

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3488	Rev B								
100	DOOSAN LATHE	0.00							
100									
Doosan	Memo	0.00							
Doosan Lathe	1-Turn as per Dwg DSK 101 & Folio FA6272-Deburr								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
110									
QC	Memo	0.00							
Quality Control									
120	HAAS CNC VERTICAL MACHINING #1	0.00							
120									
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	1-Machine as per Folio FA627 & Dwg D34882-Deburr								

SA/ent 12/05/30

12 ϕ

SA/ent 12/05/30

12 ϕ

SL Q-06-14

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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12

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12

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC2- Inspect parts off machine FAI/FAIB

0.00

SL 12-06-14

130

QC

Memo

0.00

12

0

Quality Control

140

QC8- Inspect parts - second check

0.00

Ba 12/06/18

140

QC

Memo

0.00

12

0

Quality Control

150

Chemical Conversion Coat per QSI005 4.1

0.00

150

HandFinish

Memo

0.00

12

NG 12-06-14

Hand Finishing

W/O:		WORK ORDER CHANGES					
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Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number - Insp.
Stamp

160

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

160

Powdercoat

Memo

START TIME:

FINISH TIME:

0.00

OVEN TEMPERATURE:

12X ✓

MZ
12/06/19

Powder Coating

M120222

3200F

11-10

170

QC3- Inspect Part Finish

0.00

170

QC

Memo

0.00

Quality Control

12X d 9L 12/06/20

180

HandFinishing

0.00

180

HandFinish

Memo

0.00

Hand Finishing

Install Inserts as per Dwg D3488

12X d 9L 12/06/20

W/O:		WORK ORDER CHANGES					
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Work Order ID 83417***83417***

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Start Date: 18/04/2012 Start Qty: 12.00

12

Cust Item ID:

Required Date: 02/05/2012 Req'd Qty: 12.00

12

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC5- Inspect part completeness to step on W/O

0.00

190

QC

Memo

0.00

Quality Control

12 6 12-20

200

Identify as per dwg & Stock Location: FP-2

0.00

200

Packaging

Memo

0.00

Packaging

x12 4 12/6/20

210

QC21- Final Inspection - Work Order Release

0.00

210

QC

Memo

0.00

Quality Control

12/6/20

12/6/20

W/O:		WORK ORDER CHANGES					
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Picklist Print

April-18-12 8:10:14 AM

Page 1

Work Order ID: 83417

83417

Parent Item: D3488-042

D3488-042

Parent Item Name: Blade Fitting Assembly, RH

Start Date: 18/04/2012

Required Date: 02/05/2012

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A New Issue 06-02-28 JLM
IPP Rev:B As per Rev B 06-03-30 JLM
IPP Rev:C Now On Doosan Lathe JLM Verified BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

ALS7-1032-225

Purchased

No

Each

1,075.000

48

AI S7-1032-225
INSERT

Y ALS4-1032-225 / 18121269

**

(v4g) 11/10/12

Location

Loc Qty

Loc Code

ST282

1075

100896

135

111529

27

118520

913

D6103-003

Manufactured

No

Each

22.0000

12

D6103-003

Round Billet, Aluminum

**

Location

Loc Qty

Loc Code

MAT043

22

76982

4

82262

18

2

B 84409 X10

12/05/30

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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	83417
Description: Blade Fitting, RH / Turning Detail for D3488-1/-2		Part Number:	D3488-2
Inspection Dwg: D3488 / DSK101 Rev: B / D		Page 1 of 2	

FIRST ARTICLE INSPECTION CHECKLIST

☒ **First Article**

 ☐ **Prototype**

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Lathe Section						
Ø2.150	+/-0.005	2.152	—		Vern HL-06	
Ø2.780	+/-0.005	2.778	—		"	
Ø3.125	+/-0.010	3.122	—		"	
Ø3.346	+/-0.010	3.346	—		"	
0.125 x 45°	+/-0.010 x +/-0.1°	.120 x 45°	—		"	
8.000	+0.030/-0.000	8.030	—		Vern CUL-02	
9.250	+/-0.010	9.250	—		"	
0.188	+/-0.010	.185	—		Vern HL-06	
R0.032	+/-0.010	R.032	—		R-6	
R0.062	+/-0.010	R.062	—		"	
Ø0.297	+0.005/-0.001	Ø.300	—		Vern HL-06	
Ø0.430	+/-0.010	Ø.433	—		"	
0.100	+/-0.010	.099	—		"	
0.125	+/-0.010	.128	—		"	
2.620	+/-0.010	2.620	—		"	
3.500	+/-0.010	3.500	—		"	
1.005	+/-0.010	1.003	—		"	
Ø0.484	+0.005/-0.001	Ø.487	—		"	
1.180	+/-0.010	1.180	—		"	
3.150	+/-0.010	3.150	—		"	
3.070	+/-0.010	3.069	—		"	
R0.063	+/-0.010	R.063	—		"	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Description: Blade Fitting, RH / Turning Detail for D3488-1/-2		Part Number:	D3488-2
Inspection Dwg: D3488 / DSK101 Rev: B / D		Page 2 of 2	

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Milling Section						
Ø0.508	+0.006/-0.001	508	✓		vern	SL-10
0.750	+/-0.010	748	✓		H-G	
1.500	+/-0.010	1.500	✓		vern	"
11.18	+/-0.030	11.179	✓		H-G	
R0.062	+/-0.010	062	✓		R-G	
0.125	+/-0.010	123	✓		vern	"
0.590	+/-0.010	589	✓		H-G	
0.793	+/-0.010	792	✓		"	
1.351	+/-0.010	1.352	✓		"	
1.317	+/-0.010	1.321	✓		vern	"
1.802	+/-0.010	1.807	✓		H-G	

Measured by:	SL	Audited by:	M.A	Prototype Approval:	N/A
Date:	12-06-14	Date:	12/06/18	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.03.31	New Issue	KJ/JLM	
B	08.09.19	Reformat P/O D3488-042	KJ/JLM	
C	08.12.02	Dimension 8.000 removed	KJ/JLM	

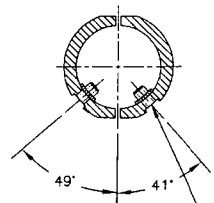
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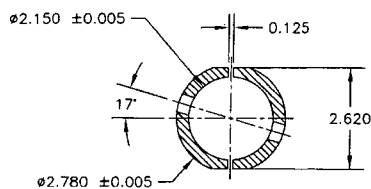
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SECTION B-B

Ø0.297
C'BORE Ø0.430 x 0.100
INSTALL ALS4-1032-225 (OR AKS4-1032-225
OR ALS7-1032-225 OR AKS7-1032-225)
INSERTS AFTER FINISH
(4 PLACES)



SECTION A-A

D3488-041/-042 BLADE FITTING ASSEMBLY PARTS LIST

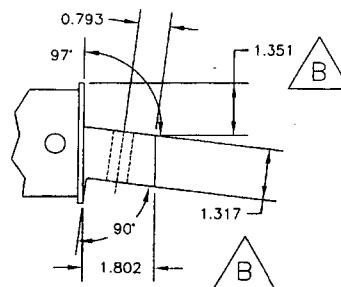
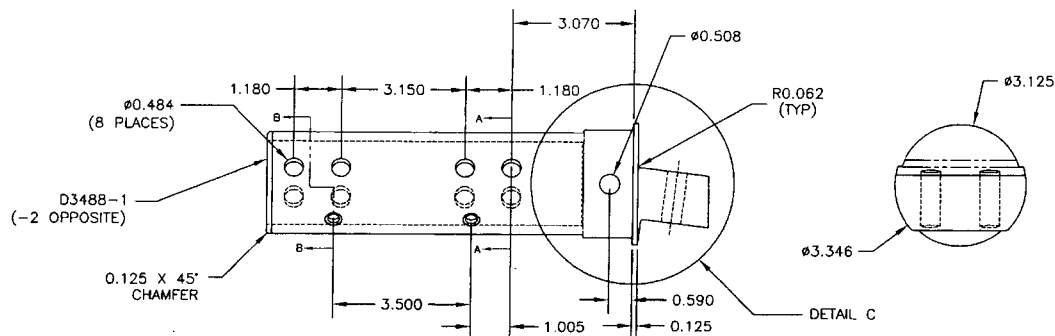
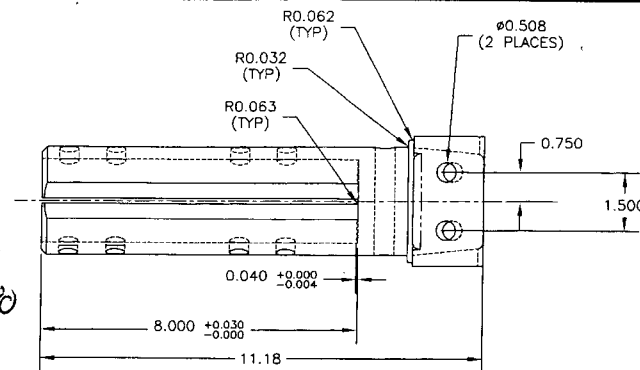
QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3488-041	BLADE FITTING ASSEMBLY (LH)
	X	D3488-042	BLADE FITTING ASSEMBLY (RH)
1		D3488-1	BLADE FITTING (LH)
	1	D3488-2	BLADE FITTING (RH)
4	4	ALS4-1032-225 or AKS4-1032-225 or ALS7-1032-225 or AKS7-1032-225	INSERT

D3488-041/-042 BLADE FITTING

- MATERIAL: MAKE D3488-1/-2 FROM ALUMINUM 7075-T7351 ROUND BAR PER QQ-A-225/9 (REF. DART MATERIAL SPEC M7075T73R)
- FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 POWDER COAT WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
- BREAK UNMARKED SHARP EDGES 0.010 TO 0.020
- INSTALL INSERTS AFTER POWDER COAT
- ALL DIMENSIONS ARE IN INCHES
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 83417 MCT
12/04/18



DETAIL C

D3488-041 SHOWN (D3488-042 OPPOSITE)

RELEASED
06.03.15 PH
REV. 05
ELN #734

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B	06.03.15	CHANGE THICKNESS
A	05.12.20	NEW ISSUE
DESIGN	PH	DRAWN BY PH
CHECKED	PH	APPROVED PH
DATE	06.03.15	TITLE
		BLADE FITTING
		DART AEROSPACE USA, INC. PORT HADLOCK, MA
		DRAWING NO. D3488
		REV. B
		SHEET 1 OF 1
		SCALE
		1:3

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